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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,315	12/21/2001	Keith Krasnansky	TI-33134 (1.122US)	6667

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EXAMINER	
KNEPPER, DAVID D	
ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/024,315	KRASNANSKY ET AL.	
	Examiner	Art Unit	
	David D. Knepper	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,7-10 and 16-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,7-10 and 16-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Applicant's correspondence filed on 1 Feb 2006 has been received and considered. Claims 1, 2, 7-10, and 16-29 are pending. Claims 3-6 and 11-15 have been canceled.

Priority Claims

2. The applicant(s) should check their filing receipts and/or the Patent Application Information Retrieval (PAIR) system for the acknowledgment of their **domestic** priority or benefit claims (if any) under 35 USC 119(e), 120 or 121 (37 CFR 1.78).

Claims

3. The rejection under 35 U.S.C. 112, first paragraph, is removed.

The Examiner apologizes for casting aspersions upon the applicant and counsel's lack of knowledge of both the prior art and the law. This was not intended. The general nature of the applicant's specification is accepted and it is acknowledged that most of the basic elements presented are well known to those of ordinary skill in the art as argued by the applicant.

In particular, the applicant points out that the Examiner's own cited art, Guan clearly teaches "...well known features such as particular communication channels (i.e. the Internet), protocols for transferring data via the Internet, and the like have not been described in detail so as not to obscure the invention" (col. 3, lines 49-54 of Guan). Thus, the details that the Examiner complained of as lacking are not really necessary since they are well known in the art.

4. Claims 24, 25 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 24 and 25 is confusing because they contain contradictory translations of speech. The first speaker's speech was translated into first text characters for communication to the destination terminal and the second speaker's speech was translated into second text characters for similar transmission to the source terminal in claim 16. Claim 16 indicates that these translations are for different speakers at different locations. Thus, it is not plausible that the first speaker's speech could be represented by second text characters unless both speakers always say exactly the same thing. It is unclear whether this is an attempt to claim multiple languages, specific symbols, characters or parameters that are not supported by the disclosure.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 2, 7-10 and 16-29 are rejected under 35 U.S.C. § 103 as being unpatentable over Fette (4,707,858) or Guan (6,502,073) in view of Spies (6,035,273) and Implementing

Basic H.323 (Basic H.323, http://www.h323forum.org/papers, Sep 1999).

As per claim 1, "communicating speech" is taught or suggested by the prior art:

"providing a bi-directional telephony link over a digital packet network... wherein the source terminal for a forward link serves as the destination terminal for a reverse link" (suggested by Fette's use of telephone lines or the like (col. 2, lines 32-33) - see Spies, figures 1 and 3 which clearly show bi-directional links are known as well as col. 1, line 63 where he refers to internet communications for transmitting speech is also known – similar teachings appear in Guan in column 3, lines 49-65);

"translating said speech into text at the source terminal" (Fette, figure 1, word recognition 16 and Guan's Figure 1, phone frontend 12 and meaning-group recognizer 14 while Guan focuses on ideographic languages, he teaches that it is obvious to use text-to-speech techniques, col. 4, line 8 and that it should not be construed that the invention can only be practiced on such a type of [ideographic] language, col. 5, lines 30-34 – see also Spies, figure 3, speech to text 24);

"communicating said text across the bi-directional digital telephony link" (noted above for Spies, see also Fette's telephone lines in figure 1 connecting the local terminal 10 to remote terminal 12 or Guan's Internet 21 as well as Guan's teaching in col. 5, lines 25-29: Although only a simplex speech communication system is shown and described, it will be apparent to one skilled in the art, in view of this disclosure, to arrive at a typically practiced duplex speech communication process. Contrary to the applicant's arguments, one of ordinary skill in the art would have known that telephone transmission lines and the Internet are commonly used to provide bi-directional information.

"determining a status of the telephony link; ending the communicating if the telephony link is terminated" (one of ordinary skill in the art would be aware of standard handshaking protocols – see, for example, slide 8 of a Basic H.323. Slide 7 shows a figure illustrating the connections between terminals along any packet based network and the H.323 standard shows that it is know to connect bi-directional communications between terminals through telephone connections PSTN using an H.323 Gateway. The standard includes Status, Call Signalling, and Disengage – report disconnect and release bandwidth (see slides 8-11));

"generating a speaker voice profile by training the source terminal to recognize words spoken by a speaker...communicating the voice profile across the telephony link from the source terminal to the destination terminal wherein the speaker's voice profile contains the information needed to generate the reproduced speech" (see Fette, figure 1, word recognizer 16 with his characteristic properties of the speaker's voice, abstract and Guan's meaning group and voice-print – see Spies' speech profiles, col. 2-3 – Spies specifically teaches that such profiles can be generated using mathematical models, as is known in the art, co. 3, lines 30-66).

It is noted that Fette and Guan do not specifically use the terminology "speech profile". However, it is submitted that the teaching of Spies which clearly uses this term in combination with speech to text conversion provides clear and convincing evidence that one of ordinary skill in the art would find it obvious to employ the relative elements in Fette (word recognizer 16 and characteristic properties of the speaker's voice) and Guan (meaning group and voice-print) to provide text and speech profile information which can be transmitted to achieve low bandwidth as taught both Fette and Guan as their desired result.

It is notes that Fette and Guan do not explicitly teach how to establish and check the

status for a "bi-directional digital telephony link". However, methods for establishing these types of communication links are notoriously well known in the art as taught by the well-known ITU standard H.323. A basic description of this standard is included showing common signaling, status and connection protocols that one of ordinary skill in the art would have been familiar with as noted above and further noted below.

Version 2 of H.323 was approved in 1998 and version 1 in 1996 so one of ordinary skill in the art would have been aware of improved telephone and related communications capabilities using this protocol prior to 1999, contrary to applicant's implication on page 15 that one of ordinary skill in the art would have no knowledge of improvements in communications technology since 1983 and/or would not know how to apply them to improve an older system.

Applicant mis-represents Fette on page 16 by quoting from column 5, lines 57-65 of Fette where Fette describes a specific embodiment and a specific example related to figures 7 and 8. Figure 1 of Fette is what the Examiner relied upon and the broader teachings of this figure were ignored by the applicant. Therefore, one of ordinary skill in the art would be well aware that other useful embodiments and examples could be employed and would not be limited to a single embodiment or example (see Fette, col. 8, lines 46-52). Furthermore, it is improper to argue that one of ordinary skill in the art would not be able to apply older (broad) teachings to improvements in that same art.

Fette clearly teaches the ability to recognize speech, convert it into text and communicate across a known data channel so the information may be converted at the received end of the channel. See, for example, column 1, lines 34-61 where he performs "translating said speech" to ASCII or a numeric code; "communicating said text across a communication link" where his

message is transmitted to a remote terminal; and line 60-61 where "translating" results whereby a voice similar to that of the original speaker is synthesized.

Claim 2, 7, 8: Using a "default voice profile" is taught by Fette in column 5, lines 50-55 where he teaches that templates generally representative of each specific word to be recognized can be used in place of a word model for each word spoken by each speaker... The use of a "voice profile" is taught as noted above and also in column 5. See his option to update his voice model by the composite statistics of this usage session (col. 5, line 36-37). As noted under claim 1 above, the generation of reproduced speech is performed at a remote (destination) terminal to generate a voice similar to that of the original speaker.

Claim 9, 10: A portion of said training is "performed during a portion of the time said speaker is communicating speech across said communication link" is taught by Fette's updating the stored words of an individual speaker (col. 1, lines 48-50) and by Guan who provides updates as a user speaks using particular parameters such as energy, excitation, and the like (col. 4, lines 20-28).

Claims 16, 17: See claim 1 above. The elements of claim 16 merely repeat in a manner that allows 2-way communication between two terminals. Fette clearly shows that his system is bi-directional in figure 2 capable of sending and receiving as is common to telephone systems. See also column 8, lines 18-23 which clearly indicate that his system is for general communications from the sending end to the receiving end and is applicable to general communications systems. This is also taught by Guan in col. 5, lines 26-28...it will be apparent to one skilled in the art, in view of this disclosure, to arrive at a typically practiced duplex speech communication process.

Claim 18-20: It is noted that Fette does not explicitly teach "a default voice profile" being used and then "using said speaker's voice profile...after said speaker's voice profile has been communicated". However, he teaches that that it is known to use word models generally representative of each specific word (col. 5, lines 50-51) and that at the end of the usage session the speaker is given the option to update his voice model (col. 5, lines 35-36). This teaches that it is obvious to update or switch to a user specific voice model after an individual's voice is fully analyzed (...at the end of the usage session). As further evidence of obviousness, Guan is cited to show that it is obvious to make such improved substitutions in column 10, lines 55-66 where he states: In an initial state of use...the meaning-group synthesizer 28 produces a discrete speech signal based on common or default voice-prints...As the speaker continues to speak, however, the voice-print annotation module 16 collects and gathers more information about the speaker's personality concluding in col. 11, lines 6-9, Over time with further speech samples form the speaker, the improvement in the naturalness of the speaker's voice personality increases. It would have been obvious for a person having ordinary skill in the pertinent art, at the time the invention was made, that a speaker's voice profile may be improved over time such that a default profile may be used until an improved version is produced and communicated to a receiver as explained by the prior art noted above.

The ability to simultaneously transmit is taught as noted above regarding claims 16, 17. Guan teaches that his communication system can implement phone communications over the Internet (see figure 1). While Guan's figure does not explicitly show bi-directional arrows, his indication of a PHONE (telephone) FRONTEND 12 and BACKEND 30 is clearly representative of Internet telephony (see Guan, col. 1, lines 13-23). It is noted that the applicant relies upon

some general statements about prior art on page 1 (paragraph 3) which acknowledges that telephony communications using Voice over Packet (VoP) is well-known.

Claims 21, 22, 27, 28: Text is known by one of ordinary skill in the art, by definition, as "symbols" made up of coded "characters". Adding this terminology fails to overcome the similar terminology noted above.

Claims 23, 29: It would have been obvious to initiate a call from either end of a desired link because the H.323 standard is flexible enough to allow any entity to initiate a call (see page 10, Basic H.323). Thus, the ability to re-connect after ending or disconnecting is obvious because there is no pre-requisite shown in the prior art for connecting in the first place. Thus, the logic required by the standard for whether or not a previous connection existed is a don't care situation and thus, any connection could follow a disconnect between endpoints.

Claims 24, 25: These are interpreted to mean that the coded symbols (i.e. – text) may be translated to/from the same set of well-known symbols. One of ordinary skill in the art would consider it a trivial problem for text or other symbols to represent the same language. However, it is also noted that Guan teaches that it would be obvious to translate between languages (col. 11-12).

Claim 26: See claim 1 above which includes a digital link such as the Internet.

Prior Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The additional prior art Kanevsky, Maes, and Stanford is cited to show other well known combinations of speech recognition for bi-directional communication over the Internet. Kanevsky teaches a known training method but it is unclear whether any references have particular relevance to claims 24-25.

A Primer on the H.323 Series Standard is cumulative to the Basic H.323 reference applied but may contain helpful explanations regarding the standard and its known uses.

8. Applicant's arguments filed 1 Feb 2006 have been fully considered but they are not persuasive.

The substantive arguments regarding prior art have been addressed with new art in the above rejections.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Some correspondence may be submitted electronically. See the Office's Internet Web site http://www.uspto.gov for additional information.

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Effective 14 January 2005, except correspondence for Maintenance Fees, Deposit Accounts (see 37 CFR 1.25(c)(4)), and Licensing and Review)see 37 CFR 5.1(c) and 5.2(c)), please address correspondence delivered by other delivery services (i.e. – Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, etc.) as follows:

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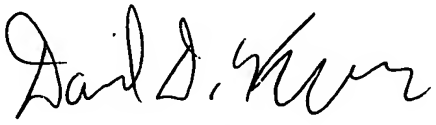
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Knepper whose telephone number is (571) 272-7607. The examiner can normally be reached on Monday-Thursday from 07:30 a.m.-6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached on (571) 272-7602.

For the Group 2600 receptionist or customer service call (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Inquiries regarding the status of submissions

relating to an application or questions on the Private PAIR system should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free) between the hours of 6 a.m. and midnight Monday through Friday EST, or by email at ebc@uspto.gov. For general information about the PAIR system, see http://pair-direct.uspto.gov .



David D. Knepper
Primary Examiner
Art Unit 2626
(previously AU 2654)
May 2, 2006